```
MMM         MMM     CCCCCCCCCCCC  LLL             DDDDDDDDDDDD     RRRRRRRRRRRR
MMM         MMM     CCCCCCCCCCCC  LLL             DDDDDDDDDDDD     RRRRRRRRRRRR
MMM         MMM     CCCCCCCCCCCC  LLL             DDDDDDDDDDDD     RRRRRRRRRRRR
MMMMMMM   MMMMMMM  CCC            LLL             DDD         DDD  RRR         RRR
MMMMMMM   MMMMMMM  CCC            LLL             DDD         DDD  RRR         RRR
MMMMMMM   MMMMMMM  CCC            LLL             DDD         DDD  RRR         RRR
MMM   MMM   MMM    CCC            LLL             DDD         DDD  RRR         RRR
MMM   MMM   MMM    CCC            LLL             DDD         DDD  RRR         RRR
MMM   MMM   MMM    CCC            LLL             DDD         DDD  RRR         RRR
MMM         MMM    CCC            LLL             DDD         DDD  RRRRRRRRRRRR
MMM         MMM    CCC            LLL             DDD         DDD  RRRRRRRRRRRR
MMM         MMM    CCC            LLL             DDD         DDD  RRRRRRRRRRRR
MMM         MMM    CCC            LLL             DDD         DDD  RRR   RRR
MMM         MMM    CCC            LLL             DDD         DDD  RRR   RRR
MMM         MMM    CCC            LLL             DDD         DDD  RRR   RRR
MMM         MMM    CCC            LLL             DDD         DDD  RRR      RRR
MMM         MMM    CCC            LLL             DDD         DDD  RRR      RRR
MMM         MMM    CCC            LLL             DDD         DDD  RRR      RRR
MMM         MMM     CCCCCCCCCCCC  LLLLLLLLLLLLLLL  DDDDDDDDDDDD     RRR         RRR
MMM         MMM     CCCCCCCCCCCC  LLLLLLLLLLLLLLL  DDDDDDDDDDDD     RRR         RRR
MMM         MMM     CCCCCCCCCCCC  LLLLLLLLLLLLLLL  DDDDDDDDDDDD     RRR         RRR
```

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LL          AAAAAA     AAAAAA   DDDDDDDD   MM      MM   CCCCCCCC   OOOOOO   DDDDDDDD   EEEEEEEEEE
LL          AAAAAA     AAAAAA   DDDDDDDD   MM      MM   CCCCCCCC   OOOOOO   DDDDDDDD   EEEEEEEEEE
LL        AA      AA  AA      AA  DD      DD  MMMM  MMMM  CC         OO      OO  DD      DD  EE
LL        AA      AA  AA      AA  DD      DD  MMMM  MMMM  CC         OO      OO  DD      DD  EE
LL        AA      AA  AA      AA  DD      DD  MM  MM  MM  CC         OO      OO  DD      DD  EE
LL        AA      AA  AA      AA  DD      DD  MM  MM  MM  CC         OO      OO  DD      DD  EE
LL        AA      AA  AA      AA  DD      DD  MM      MM  CC         OO      OO  DD      DD  EEEEEEEE
LL        AA      AA  AA      AA  DD      DD  MM      MM  CC         OO      OO  DD      DD  EEEEEEEE
LL        AAAAAAAAAA  AAAAAAAAAA  DD      DD  MM      MM  CC         OO      OO  DD      DD  EE
LL        AAAAAAAAAA  AAAAAAAAAA  DD      DD  MM      MM  CC         OO      OO  DD      DD  EE
LL        AA      AA  AA      AA  DD      DD  MM      MM  CC         OO      OO  DD      DD  EE          ....
LL        AA      AA  AA      AA  DD      DD  MM      MM  CC         OO      OO  DD      DD  EE          ....
LLLLLLLLLL  AA      AA  AA      AA  DDDDDDDD   MM      MM   CCCCCCCC   OOOOOO   DDDDDDDD   EEEEEEEEEE    ....
LLLLLLLLLL  AA      AA  AA      AA  DDDDDDDD   MM      MM   CCCCCCCC   OOOOOO   DDDDDDDD   EEEEEEEEEE    ....

LL          IIIIII     SSSSSSSS
LL          IIIIII     SSSSSSSS
LL            II     SS
LL            II     SS
LL            II     SS
LL            II     SS
LL            II       SSSSSS
LL            II       SSSSSS
LL            II             SS
LL            II             SS
LL            II             SS
LL            II             SS
LLLLLLLLLL  IIIIII   SSSSSSSS
LLLLLLLLLL  IIIIII   SSSSSSSS
```

```
0000          .TITLE  LAADMCODE - LPA-11 DED. A/D MICROCODE
0000          .IDENT  'V04-000'
0000    ;
0000    ;*******************************************************************************
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0000    ;*                                                                             *
0000    ;*******************************************************************************
0000    ;
0000
0000    ;++
0000    ; FACILITY:     LPA-11 UTILITY ROUTINES
0000    ;
0000    ; ABSTRACT:
0000    ;       THIS MODULE CONTAINS THE LPA-11 DEDICATED A/D MODE MICROCODE.
0000    ;
0000    ; ENVIRONMENT:  USER MODE (LINKED WITH LPA-11 LOADER PROCESS)
0000    ;
0000    ; AUTHOR:       CHUCK SAMUELSON.        CREATION DATE:  NOVEMBER, 1977
0000    ; MODIFIED BY:
0000    ;
0000    ;       AARON BOXER,    JULY - OCTOBER, 1978
0000    ;       STEVE BECKHARDT,        OCTOBER,1978
0000    ;               ADDED MODULE PREFACE AND MICROCODE TYPE TO LAST WORD
0000    ;               OF MICROCODE
0000    ;
0000    ;       V02-001         AARON BOXER AND DOUG BELLI      MAY 1979 - JAN 1980
0000    ;                       FIXED VARIOUS MICROCODE BUGS
0000    ;--
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                                  00000000    48          .PSECT  _LPA$CODE,NOWRT,WORD
                                      0000    49
                                      0000    50
                                      0000    51 LPA$$ADMCODE::
6693 01FF 6696 6694 6A92 7290 0100    0000    52          .WORD     256, 29328, 27282, 26260, 26262,   511, 26259, 26264
                                      6698    000E
0180 820B 6670 1DFF 6690 0107 6699    0010    53          .WORD   26265,   263, 26256,  7679, 26224,-32245,   384, 26258
                                      6692    001E
6679 8210 6678 8119 8614 6390 21A0    0020    54          .WORD    8608, 25488,-31212,-32487, 26232,-32240, 26233,-32240
                                      8210    002E
9BDA 60F0 26A0 012A 898D 8120 898C    0030    55          .WORD  -30324,-32480,-30323,   298,  9888, 24816,-25638,-30322
                                      898E    003E
66B0 01F0 66D0 0105 6580 102A 2690    0040    56          .WORD    9872,  4138, 25984,   261, 26320,   496, 26288,   256
                                      0100    004E
28F0 36F4 811A 0105 4690 831B 60F0    0050    57          .WORD   24816,-31973, 18064,   261,-32486, 14068, 10480, 22161
                                      5691    005E
6758 26A8 9750 8C00 479F 6881 8335    0060    58          .WORD  -31947, 26753, 18335,-29696,-26800,  9896, 26456,-28784
                                      8F90    006E
897B 833F 6183 8E8F 6158 8991 863A    0070    59          .WORD  -31174,-30319, 24920,-29041, 24963,-31937,-30341,-24320
                                      A100    007E
8770 6152 8FFE A190 8FFE A729 847B    0080    60          .WORD  -31621,-22743,-28674,-24176,-28674, 24914,-30864,-23029
                                      A60B    008E
0136 89FE 8763 618B 846B 874E 6182    0090    61          .WORD   24962,-30898,-31637, 24971,-30877,-30210,   310, 25748
                                      6494    009E
A60C 8454 A180 6298 010F 6495 01F1    00A0    62          .WORD     497, 25749,   271, 25240,-24192,-31660,-23028,   384
                                      0180    00AE
6288 6298 010F 6690 010C 6290 61CC    00B0    63          .WORD   25036, 25232,   268, 26256,   271, 25240, 25224,   383
                                      017F    00BE
01C0 816D 8766 615B 8C88 A190 66B2    00C0    64          .WORD   26290,-24176,-29560, 24923,-30874,-32403,   448, 25241
                                      6299    00CE
66B2 017E 8768 615B 89FE 66C2 0101    00D0    65          .WORD     257, 26306,-30210, 24923,-30872,   382, 26290,-30210
                                      89FE    00DE
0180 8147 8776 6159 8178 8773 6189    00E0    66          .WORD   24969,-30861,-32392, 24921,-30858,-32441,   384, 25241
                                      6299    00EE
A600 010C A455 A444 8141 66B2 01BF    00F0    67          .WORD     447, 26290,-32447,-23484,-23467,   268,-23040, 26288
                                      66B0    00FE
A609 017E 8483 A180 6298 61C0 0103    0100    68          .WORD     259, 25024, 25240,-24192,-31613,   382,-23031, 25017
                                      61B9    010E
8790 6189 6288 6298 61C0 0103 6290    0110    69          .WORD   25232,   259, 25024, 25240, 25224, 24969,-30832,-30357
                                      896B    011E
0107 2600 2EF4 8C6D A190 8C71 2140    0120    70          .WORD    8512,-29583,-24176,-29587, 12020,  9728,   263, 26288
                                      66B0    012E
896E 99CD 81E0 81D6 89E1 E100 019A    0130    71          .WORD     410, -7936,-30239,-32298,-32288,-26163,-30354,-30354
                                      896E    013E
84A5 A180 86CF 615C 669F 896E 896E    0140    72          .WORD  -30354,-30354, 26271, 24924,-31025,-24192,-31579,-24176
                                      A190    014E
82C3 7D38 6638 4698 4494 102D 8C34    0150    73          .WORD  -29644,  4141, 17556, 18072, 26168, 32056,-32061, 23701
                                      5C95    015E
84CD A190 84B3 A180 8F31 21A0 4298    0160    74          .WORD   17048,  8608,-28879,-24192,-31565,-24176,-31539,  9224
                                      2408    016E
5E9A 5E99 5E98 102A F18F 87BB 2110    0170    75          .WORD    8464,-30789, -3697,  4138, 24216, 24217, 24218, 32136
                                      7D88    017E
82C8 7D38 4698 4495 F18F 653A 7D89    0180    76          .WORD   32137, 25914, -3697, 17557, 18072, 32056,-32056,-32336
                                      81B0    018E
8936 24B8 81B1 6508 0104 4698 4298    0190    77          .WORD   17048, 18072,   260, 25864,-32335,  9400,-30410,   290
                                      0122    019E
6182 F18F 84A5 6737 81A5 83D3 60FB    01A0    78          .WORD   24827,-31789,-32347, 26423,-31579, -3697, 24962,-31015
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                                        86D9  01AE
8C6F 4190 1008 86DD 2100 100A           8974  01B0     79          .WORD   -30348,  4106,  8448,-31011,  4104, 16784,-29585,-32265
                                        81F7  01BE
100C 8E76 6158 2608 8974 86E3           6182  01C0     80          .WORD    24962,-31005,-30348,  9736, 24920,-29066,  4108,   258
                                        0102  01CE
5990 896E 83EE 60F8 0122 83F1           60F8  01D0     81          .WORD    24824,-31759,   290, 24824,-31762,-30354, 22928,-29585
                                        8C6F  01DE
8D6E 81F7 84F6 2110 8C6F 4190           7990  01E0     82          .WORD    31120, 16784,-29585,  8464,-31498,-32265,-29330, 12528
                                        30F0  01EE
6881 7581 8978 83FD 4190 6691           0102  01F0     83          .WORD      258, 26257, 16784,-31747,-30344, 30081, 26753,-30228
                                        89EC  01FE
6176 8F19 4796 8735 B990 8735           A120  0200     84          .WORD   -24288,-30923,-18032,-30923, 18326,-28903, 24950,-29920
                                        8B20  020E
8A11 657C 469C 1030 8B11 60F6           0101  0210     85          .WORD      257, 24822,-29935,  4144, 18076, 25980,-30191,  9974
                                        26F6  021E
0118 25F0 7DBC 017E 469C 7081           8938  0220     86          .WORD   -30408, 28801, 18076,   382, 32188,  9712,   280,-30292
                                        89AC  022E
8F20 675F 6881 05FF 0800 7084           89FD  0230     87          .WORD   -30211, 28804,  2048,  1535, 26753, 26463,-28896,-30442
                                        8916  023E
6636 6636 8911 8EF9 615F 66C2           0180  0240     88          .WORD      384, 26306, 24927,-28935,-30447, 26166, 26166, 26166
                                        6636  024E
89F9 6586 1D41 6881 7081 6606           01D4  0250     89          .WORD      468, 26118, 28801, 26753,  7489, 25990,-30215, 26166
                                        6636  025E
6636 6636 6636 6636 6636 6636           6636  0260     90          .WORD    26166, 26166, 26166, 26166, 26166, 26166, 26166, 26166
                                        6636  026E
8941 8C3F 8EF9 5990 7081 66C6           01A0  0270     91          .WORD      416, 26310, 28801, 22928,-28935,-29633,-30399, 16784
                                        4190  027E
6499 61C4 0110 8E42 21A0 6586           8FF9  0280     92          .WORD   -28679, 25990,  8608,-29118,   272, 25028, 25753, 28801
                                        7081  028E
2180 8D50 21A0 26BF 2190 24B8           4698  0290     93          .WORD    18072,  9400,  8592,  9919,  8608,-29360,  8576,-30389
                                        894B  029E
6390 21A0 24B9 8E52 21A0 8A4C           667F  02A0     94          .WORD    26239,-30132,  8608,-29102,  9401,  8608, 25488,-29099
                                        8E55  02AE
6636 89F9 65C8 0101 66B2 01FD           2190  02B0     95          .WORD     8592,   509, 26290,   257, 26056,-30215, 26166, 26166
                                        6636  02BE
6586 7DC9 0101 8EFD 8C69 4799           7081  02C0     96          .WORD    28801, 18329,-29591,-28931,   257, 32201, 25990,  9974
                                        26F6  02CE
6636 6636 8978 6636 8937 26F6           812D  02D0     97          .WORD   -32467,  9974,-30409, 26166,-30344, 26166, 26166, 26166
                                        6636  02DE
6636 6636 6636 6636 6636 6636           6636  02E0     98          .WORD    26166, 26166, 26166, 26166, 26166, 26166, 26166, 26198
                                        6656  02EE
A190 8FF9 A120 6696 6693 61C6           01C0  02F0     99          .WORD      448, 25030, 26259, 26262,-24288,-28679,-24176,-28679
                                        8FF9  02FE
66C2 0180 8CF9 6186 89AC 0183           26B3  0300    100          .WORD     9907,   387,-30292, 24966,-29447,   384, 26306,-30215
                                        89F9  030E
6636 6636 6636 6636 6636 6636           6636  0310    101          .WORD    26166, 26166, 26166, 26166, 26166, 26166, 26166, 26166
                                        6636  031E
669E 0100 66C6 01E0 6287 6296           6636  0320    102          .WORD    26166, 25238, 25223,   480, 26310,   256, 26270,-24176
                                        A190  032E
89AC 019F 8B97 618E 8FA1 A729           8F97  0330    103          .WORD   -28777,-22743,-28767, 24974,-29801,   415,-30292, 26238
                                        667E  033E
8999 8FA7 6159 8999 8FA4 6152           8997  0340    104          .WORD   -30313, 24914,-28764,-30311, 24921,-28761,-30311,   384
                                        0180  034E
6293 6186 669F 8997 66B2 01BF           6299  0350    105          .WORD    25241,   447, 26290,-30313, 26271, 24966, 25235,   310
                                        0136  035E
8CB5 A180 6298 010F 6495 01F1           6494  0360    106          .WORD    25748,   497, 25749,   271, 25240,-24192,-29515,-22998
                                        A62A  036E
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6690 010C 6292 61CA 0180 66BA 0140  0370   107        .WORD     320, 26298,   384, 25034, 25234,   268, 26256,   271
                              010F  037E
E98F 66C2 0140 8FC7 615A 6288 6298  0380   108        .WORD   25240, 25224, 24922,-28729,   320, 26306, -5745,   384
                              0180  038E
4494 1006 669E E98F 66B2 01BF 6299  0390   109        .WORD   25241,   447, 26290, -5745, 26270,  4102, 17556, 18072
                              4698  039E
6288 6630 5E90 5C95 8AD8 7D38 6638  03A0   110        .WORD   26168, 32056,-29992, 23701, 24208, 26160, 25224, -3698
                              F18E  03AE
0104 4690 89D4 8ADD 7D38 4698 4495  03B0   111        .WORD   17557, 18072, 32056,-29987,-30252, 18064,   260, 32000
                              7D00  03BE
8BE8 60F8 0105 2618 8E73 6182 89D5  03C0   112        .WORD  -30251, 24962,-29069,  9752,   261, 24824,-29720,-30352
                              8970  03CE
3D10 3DF0 1D80 6881 5691 0502 30F0  03D0   113        .WORD   12528,  1282, 22161, 26753,  7552, 15856, 15632, 15616
                              3D00  03DE
1030 0558 7DB8 010C A688 3D50 3D40  03E0   114        .WORD   15680, 15696,-22904,   268, 32184,  1368,  4144,  7425
                              1D01  03EE
6182 26F6 6299 61B8 016E A698 89FE  03F0   115        .WORD  -30210,-22888,   366, 25016, 25241,  9974, 24962,-27390
                              9502  03FE
5E9D 5E9B 5E9C 1004 0802 9957 21A0  0400   116        .WORD    8608,-26281,  2050,  4100, 24220, 24219, 24221, 23703
                              5C97  040E
6690 0111 6299 41C8 66B8 0140 A698  0410   117        .WORD  -22888,   320, 26296, 16840, 25241,   273, 26256,  4102
                              1006  041E
27A8 1006 81A2 0115 9516 9416 618C  0420   118        .WORD   24972,-27626,-27370,   277,-32350,  4102, 10152,-27325
                              9543  042E
954D 21A0 4496 663D 2482 9418 A180  0430   119        .WORD  -24192,-27624,  9346, 26173, 17558,  8608,-27315,  9347
                              2483  043E
100A 9210 6675 658D 922F 663D 6288  0440   120        .WORD   25224, 26173,-28113, 25997, 26229,-28144,  4106, 18072
                              4698  044E
9984 822D 6578 8C34 A190 9428 A180  0450   121        .WORD  -24192,-27608,-24176,-29644, 25976,-32211,-26236, 32141
                              7D8D  045E
1006 4497 9238 6538 4698 9430 A180  0460   122        .WORD  -24192,-27600, 18072, 25912,-28104, 17559,  4102,-28380
                              9124  046E
0141 A699 6588 6608 0104 4698 5C97  0470   123        .WORD   23703, 18072,   260, 26120, 25992,-22887,   321, 25017
                              61B9  047E
8D8F 9959 9646 6390 9136 6299 61C8  0480   124        .WORD   25032, 25241,-28362, 25488,-27066,-26279,-29297,-24176
                              A190  048E
961D 6390 8991 9616 8F90 6158 8C34  0490   125        .WORD  -29644, 24920,-28784,-27114,-30319, 25488,-27107,-26279
                              9959  049E
8C28 A190 9453 A180 4698 89CC 0152  04A0   126        .WORD     338,-30260, 18072,-24192,-27565,-24176,-29656, -3704
                              F188  04AE
26FC 9565 9465 6189 6881 8135 0568  04B0   127        .WORD    1384,-32459, 26753, 24969,-27547,-27291,  9980,   276
                              0114  04BE
66C2 0102 82A9 667E 669F 0163 669E  04C0   128        .WORD   26270,   355, 26271, 26238,-32087,   258, 26306,-26261
                              996B  04CE
010D 1DA7 9175 0506 1D74 966D 6182  04D0   129        .WORD   24962,-27027,  7540,  1286,-28299,  7591,   269, 26270
                              669E  04DE
663A 469A 7990 91BA 3D00 7090 653E  04E0   130        .WORD   25918, 28816, 15616,-28230, 31120, 18074, 26170, 30010
                              753A  04EE
6498 6390 610A 01F9 9479 21A0 0800  04F0   131        .WORD    2048,  8608,-27527,   505, 24842, 25488, 25752,  8608
                              21A0  04FE
9585 21A0 2418 9482 21A0 2408 947F  0500   132        .WORD  -27521,  9224,  8608,-27518,  9240,  8608,-27259,  8576
                              2180  050E
8135 938F 60FA 0119 2510 3D00 9394  0510   133        .WORD  -27756, 15616,  9488,   281, 24826,-27761,-32459,  4105
                              1009  051E
8926 2217 2206 8135 05FE 1D97 0802  0520   134        .WORD    2050,  7575,  1534,-32459,  8710,  8727,-30426, 31120
                              7990  052E
01E1 2510 3D00 0801 753A 663A 469A  0530   135        .WORD   18074, 26170, 30010,  2049, 15616,  9488,   481, 24826
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                                        60FA  053E
8135 25B0 30F0 66C2 0990 8135           93A2  0540   136        .WORD   -27742,-32459,  2448, 26306, 12528,  9648,-32459,  4101
                                        1005  054E
4690 92B0 7D70 4690 100D 94BC           4190  0550   137        .WORD    16784,-27460,  4109, 18064, 32112,-27984, 18064, 25968
                                        6570  055E
753A 469A 1DD5 1009 8B25 6670           4690  0560   138        .WORD    18064, 26224,-29915,  4105,  7637, 18074, 30010,  8448
                                        2100  056E
91C0 0110 96BF 8135 2510 7D90           8C27  0570   139        .WORD   -29657, 32144,  9488,-32459,-26945,   272,-28224,   273
                                        0111  057E
66C2 0180 100D 6488 8F31 21A0           6690  0580   140        .WORD    26256,  8608,-28879, 25736,  4109,   384, 26306,  9224
                                        2408  058E
21A0 5C98 94CB 21A0 2418 94C8           21A0  0590   141        .WORD     8608,-27448,  9240,  8608,-27445, 23704,  8608,-27442
                                        94CE  059E
469A 1DB4 8135 25B0 0800 7084           4498  05A0   142        .WORD    17560, 28804,  2048,  9648,-32459,  7604, 18074, 26170
                                        663A  05AE
012B 65BB 010C 665B 665B 260B           753A  05B0   143        .WORD    30010,  9739, 26203, 26203,   268, 26043,   299, 24826
                                        60FA  05BE
1DF7 1009 8135 93EB 60FA 0110           93E5  05C0   144        .WORD   -27675,   272, 24826,-27669,-32459,  4105,  7671,  1306
                                        051A  05CE
0107 2618 3DF0 100B 81BB 669F           01E4  05D0   145        .WORD      484, 26271,-32325,  4107, 15856,  9752,   263, 26040
                                        65B8  05DE
8135 65C9 0102 8735 6188 4699           7081  05E0   146        .WORD    28801, 18073, 24968,-30923,   258, 26057,-32459, 31120
                                        7990  05EE
0127 2510 3D00 0800 753A 663A           469A  05F0   147        .WORD    18074, 26170, 30010,  2048, 15616,  9488,   295, 24826
                                        60FA  05FE
4699 0802 1004 6498 0140 8135           9B02  0600   148        .WORD   -25854,-32459,   320, 25752,  4100,  2050, 18073, 23704
                                        5C98  060E
60F8 0102 26FB 6498 4798 9C08           21A0  0610   149        .WORD     8608,-25592, 18328, 25752,  9979,   258, 24824,-25834
                                        9B16  061E
6189 669B 014C 9E16 6159 669B           0198  0620   150        .WORD      408, 26267, 24921,-25066,   332, 26267, 24969, 25488
                                        6390  062E
101F 992A 9D1E 6189 660B 0126           9D1B  0630   151        .WORD   -25317,   294, 26123, 24969,-25314,-26326,  4127,  2048
                                        0800  063E
658A 9E55 7959 760B 0113 0801           469A  0640   152        .WORD    18074,  2049,   275, 30219, 31065,-25003, 25994,   266
                                        010A  064E
011F 5E9F 469D 0801 708B 658A           700B  0650   153        .WORD    28683, 25994, 28811,  2049, 18077, 24223,   287, 26559
                                        67BF  065E
21A0 9A31 667F 5C98 9C31 21A0           6498  0660   154        .WORD    25752,  8608,-25551, 23704, 26239,-26063,  8608,-28879
                                        8F31  066E
617B 5E90 5E9B 0800 101C 669F           0102  0670   155        .WORD      258, 26271,  4124,  2048, 24219, 24208, 24955,-26047
                                        9A41  067E
9B4B 677F 6488 9C42 21A0 6498           6670  0680   156        .WORD    26224, 25752,  8608,-25534, 25736, 26495,-25781,-25527
                                        9C49  068E
9C4D 21A0 669C 0105 994C 0101           993C  0690   157        .WORD   -26308,   257,-26292,   261, 26268,  8608,-25523, 23704
                                        5C98  069E
9928 0107 915A 9D3C 613F 9A4D           667C  06A0   158        .WORD    26236,-26035, 24895,-25284,-28326,   263,-26328, 25488
                                        6390  06AE
0800 36F4 8F8B 2790 8C34 A190           862D  06B0   159        .WORD   -31187,-24176,-29644, 10128,-28789, 14068,  2048, 22161
                                        5691  06BE
6390 6390 6390 6390 6180 6881           8BFE  06C0   160        .WORD   -29698, 26753, 24960, 25488, 25488, 25488, 25488, 26262
                                        6696  06CE
6390 6390 6390 618D 892F 66B6           0107  06D0   161        .WORD      263, 26294,-30417, 24973, 25488, 25488, 25488, 25488
                                        6390  06DE
27A9 9B7A 6678 66B8 0107 6698           6390  06E0   162        .WORD    25488, 26264,   263, 26296, 26232,-25734, 10153,-25220
                                        9D7C  06EE
9959 9E7F 6390 9985 0160 9974           2180  06F0   163        .WORD     8576,-26252,   352,-26235, 25488,-24961,-26279,-29297
                                        8D8F  06FE
```

```
100B 669F 015F 8991 9E76 8F90 6159  0700   164          .WORD    24921,-28784,-24970,-30319,   351, 26271,  4107, 24216
                              5E98  070E
8C34 A79C 9C8B A180 5E9B 5E95 5E99  0710   165          .WORD    24217, 24213, 24219,-24192,-25461,-22628,-29644, 17556
                              4494  071E
0140 6298 6130 4690 5C97 4495 5C96  0720   166          .WORD    23702, 17557, 23703, 18064, 24880, 25240,   320, 25020
                              61BC  072E
0180 8C33 A190 9C9A A180 6299 61C0  0730   167          .WORD    25024, 25241,-24192,-25446,-24176,-29645,   384,  9758
                              261E  073E
0501 1030 9AC2 9FA5 615E 6493 61CE  0740   168          .WORD    25038, 25747, 24926,-24667,-25918,  4144,  1281, 24968
                              6188  074E
67BE 0107 8F30 615E 6298 0111 6492  0750   169          .WORD    25746,   273, 25240, 24926,-28880,   263, 26558, 25065
                              61E9  075E
5E99 5E98 710E 610E 610E 0112 8F32  0760   170          .WORD   -28878,   274, 24846, 24846, 28942, 24216, 24217, 18076
                              469C  076E
658E 7D8B 7D85 7D8C 7D89 7D88 1006  0770   171          .WORD     4102, 32136, 32137, 32140, 32133, 32139, 25998,-24192
                              A180  077E
669F 015E 8D35 4190 7081 E98F 9CBF  0780   172          .WORD   -25409, -5745, 28801, 16784,-29387,   350, 26271,   384
                              0180  078E
9ED0 6182 99A8 61C8 0180 6493 669E  0790   173          .WORD    26270, 25747,   384, 25032,-26200, 24962,-24880,-30348
                              8974  079E
0148 6881 8B72 5691 76B4 0107 2614  07A0   174          .WORD     9748,   263, 30388, 22161,-29838, 26753,   328, 18077
                              469D  07AE
9EDD 21A0 26B0 6499 0180 8938 65CD  07B0   175          .WORD    26061,-30408,   384, 25753,  9904,  8608,-24867, 25737
                              6489  07BE
8989 9BE7 60F0 2190 9EE0 6390 21A0  07C0   176          .WORD     8608, 25488,-24864,  8592, 24816,-25625,-30327, 26224
                              6670  07CE
2180 9DEC 21A0 6488 9CE9 21A0 9ADD  07D0   177          .WORD   -25891,  8608,-25367, 25736,  8608,-25108,  8576, 24816
                              60F0  07DE
4190 6296 0105 9AE9 6670 898A 9BF2  07E0   178          .WORD   -25614,-30326, 26224,-25879,   261, 25238, 16784, 25239
                              6297  07EE
0000 0000 0000 0000 0000 0000 8135  07F0   179          .WORD   -32459,     0,     0,     0,     0,     0,     0,     2
                              0002  07FE
                                    0800   180          .END
```

```
LPA$$ADMCODE     00000000 RG    01
```

```
                                        +-----------------+
                                        ! Psect synopsis !
                                        +-----------------+

PSECT name                      Allocation          PSECT No.  Attributes
----------                      ----------          ---------  ----------
.  ABS  .                       00000000  (    0.)  00 (  0.)  NOPIC   USR   CON   ABS   LCL NOSHR NOEXE NORD  NOWRT NOVEC BYTE
_LPA$CODE                       00000800  ( 2048.)  01 (  1.)  NOPIC   USR   CON   REL   LCL NOSHR   EXE   RD  NOWRT NOVEC WORD

                                     +--------------------------+
                                     ! Performance indicators !
                                     +--------------------------+

Phase                     Page faults    CPU Time       Elapsed Time
-----                     -----------    --------       ------------
Initialization                     32    00:00:00.06    00:00:00.52
Command processing                103    00:00:00.42    00:00:01.08
Pass 1                             78    00:00:01.68    00:00:03.71
Symbol table sort                   0    00:00:00.00    00:00:00.00
Pass 2                             72    00:00:00.74    00:00:02.45
Symbol table output                 2    00:00:00.01    00:00:00.01
Psect synopsis output               1    00:00:00.01    00:00:00.01
Cross-reference output              0    00:00:00.00    00:00:00.00
Assembler run totals              291    00:00:02.93    00:00:07.79

The working set limit was 750 pages.
7354 bytes (15 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 1 non-local and 0 local symbols.
180 source lines were read in Pass 1, producing 15 object records in Pass 2.
0 pages of virtual memory were used to define 0 macros.

                                        +----------------------------+
                                        ! Macro library statistics !
                                        +----------------------------+

Macro library name                                  Macros defined
------------------                                  --------------
_$255$DUA28:[SYSLIB]STARLET.MLB;2                              0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:LAADMCODE/OBJ=OBJ$:LAADMCODE MSRC$:LAADMCODE/UPDATE=(ENH$:LAADMCODE)
```

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CONFIDENTIAL AND PROPRIETARY

MELDR

MDL32

LALOAD
MAP

MDL32
MAP

XFLOADER
MAP

LALOADER
LIS

XFLOADER
LIS

LADAMCODE
LIS

LALOAD
LIS

MARBLI

MARBLI
MAP

LALOADER
MAP

LAMRMCODE
LIS

LAADMCODE
LIS

MARBLI
LIS

LADMOT
LIS